September 29, 2000

Mr. James Chang (SFD-8-1)
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Subject: **Contract No. 68-W-98-0220 / WA No. 220-11-Q7LW**
George/Norton Air Force Base Work Assignment
Review of Draft Sampling and Analysis Plan Addendum October 2000
Groundwater Sampling Event OU-2/OT-69/FT-20
George Air Force Base, September 2000

Dear Mr. Chang,

Enclosed please find TechLaw's Review of Draft Sampling and Analysis Plan Addendum October 2000 Groundwater Sampling Event OU-2/OT-69/FT-20, George Air Force Base dated September 2000 (the SAP).

This review is being forwarded to you through electronic mail (via Internet) in WordPerfect® Version 8.0. A hard copy of the evaluation will also be submitted with this cover letter.

Thank you for the opportunity to provide U.S. EPA with technical services at George Air Force Base. TechLaw looks forward to working with you in the future. Should you have any questions, please call me at (415) 281-8730, ext. 14.

Sincerely,

Indira Balkissoon
Site Manager

copy to: Angela Commisso, Region 9 w/o attachment
P. Brown-Derocher, Central Files

GEORGE AIR FORCE BASE
Victorville, California

Review of Draft Sampling and Analysis Plan Addendum October 2000 Sampling Event
OU-2/OT-69/FT-20
George Air Force Base, California
September 2000

Submitted to:

Mr. James Chang
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Region IX (SFD-8-1)
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Prepared by:

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U.S. EPA Work Assignment No. **220-11-Q7LW**

U.S. EPA Site ID No. **CA2570024453**

Contract No.
68-W-98-220

U.S. EPA WAM
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Review of Draft Sampling and Analysis Plan Addendum October 2000 Sampling Event
OU-2/OT-69/FT-20
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Specific Comments:

1. **Section 3.1 Objectives., page 3-1:** The last bullet states that one of the objectives of field activities is to "confirm the absence of ethylene dibromide (EDB) at MW-17." It is not clear why MW-17 is being evaluated for EDB since Table 3.1 states that MW-17 is being monitored for PCE/BTEX concentrations. Please revise the text to discuss the basis for monitoring MW-17 for EDB. If this was a mistake and MW-17 will not be monitored for EDB please correct the text.

2. **Figure 3. 1:** This figure is helpful in identifying the proposed monitoring locations and the areal extent of the free product plume at OU-2. Additional figures showing the configuration of the dissolved phase hydrocarbons (PCE, TCE, JP-4) would assist in understanding the rationale for selecting the proposed monitoring locations presented in Table 3.1. Please revise the SAP to include figures showing the areal extent of the dissolved phase hydrocarbons as well as the free product plume.

3. **Figure 3. 1:** Figure 3.1 does not include groundwater flow directions. This information would aide the reader in identifying upgradient and downgradient wells in OU-2. Please revise the map to include groundwater flow information. In addition, it doesn't appear that the color bars on Figures 3-1 and 3-2 were updated in accordance with the color scheme presented in Section 3.2.

4. **Table 3-1 Well Sample Summary:** This table indicates that MW-54 is proposed for the collection of groundwater samples for the analysis of EDB and DBCP rather than MW-51. Prior to the development of the SAP, U.S. EPA and the Air Force selected MW-51 as one of the wells to be sampled for EDB and DBCP. U.S. EPA and the Air Force also agreed that U.S. EPA would collect split samples at MW-45, MW-99, and MW-67 for EDB and DBCP analysis. If free product is detected in groundwater monitoring well MW-67, then groundwater samples will be collected from monitoring well MW-51 instead of monitoring well MW-67. Please revise Table 3.1 to show that MW-51, rather than MW-54 will be sampled if free product is detected in MW-67. Also, revise the Table 3.1 to indicate that U.S. EPA plans to split samples at MW-45, MW-99, and MW-67.

5. **Table 3-1:** This table provides a well sample summary for the October Monitoring Event. However, several monitoring wells proposed by Montgomery Watson for the OU-1 and

OU-3 Basewide Groundwater Monitoring October 2000 Event are also included in the SAP. The overlapping wells, NZ-51, MW-102, MW-103, MW-63 and MW-64. MW-63 and MW-64, are being monitored by Montgomery Watson as part of the Groundwater Pesticide Investigation. It might be more efficient and cost effective to include these sample locations as part of either the HydroGeoLogic or the Montgomery Watson sampling programs rather than as part of both sampling programs. Please revise the text to include rationale for the overlap of monitoring wells NZ-51, MW-102, MW-103, MW-63 and MW-64 between the SAP and the Montgomery Watson monitoring programs for October.

6. **Section 7.4.3 Groundwater Discharge Measurements:** In previous sampling events, groundwater levels have fallen by a distance greater than can be accounted for by the amount of groundwater purged from the well. Please assure that in this sampling event the discharge flow meters are carefully calibrated and the drawdown amounts are checked carefully and the field personnel are asked to verify that the amount of water purged and measured drawdown is compatible with the quantities shown in Table 6.1.